

Substitute form 1449A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/758,871
		Filing Date	January 16, 2004
		First Named Inventor	Sheppard et al.
		Group Art Unit	2845-2812
		Examiner Name	Richards, N. Drew GEYER, S.
Sheet 1 of 3	Attorney Docket Number	5308-291	

U.S. PATENTS AND PATENT PUBLICATIONS

Examiner Initials*	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Kind Code (if known)		
SBG	1.	US-6,150,680		Eastman et al.	11-21-2000
SBG	2.	US-6,086,673		Molnar	07-11-2000
SBG	3.	US-5,686,737		Allen	11-11-1997
SBG	4.	US-4,755,867		Cheng	07-05-1988
SBG	5.	US-2004/0241970	A1	Ring	12-02-2004
SBG	6.	US-2003/0123829	A1	Taylor	07-03-2003
SBG	7.	US-2002/0167023	A1	Charvarkar et al.	11-14-2002
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		Office	Number	Kind Code (if known)			
SBG	9.	EP	0 334 006	A1	Siemens AG	09-27-1989	
SBG	10.	JP	2004-342810		Fujitsu Ltd.	12-02-2004	Abstract
SBG	11.	JP	11261053		Furukawa Electric Co. Ltd.	09-24-1999	Abstract
SBG	12.	PCT	WO 04/008495		Cree, Inc.	01-22-2004	

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SBG	13.	Ando et al., "10-W/mm AlGaIn-GaN HFET With a Field Modulating Plate," <i>IEEE Electron Device Letters</i> , 24(5), pp. 289-291 (May 2003).	
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Examiner Signature	<i>[Signature]</i>	Date Considered	12-8-05
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SBG	20.	Kanaev et al., "Femtosecond and Ultraviolet Laser Irradiation of Graphitelike Hexagonal Boron Nitride," <i>Journal of Applied Physics</i> , 96(8), pp. 4483-4489 (Oct. 15, 2004).	
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SBG	29.	Parikh et al., "Development of Gallium Nitride Epitaxy and Associated Material-Device Correlation for RF, Microwave and MM-wave Applications," Cree, Inc. (35 slides).	
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SBG	31.	Shiojima et al., "Improved Carrier Confinement by a Buried p-Layer in the AlGaIn/GaN HEMT Structure," <i>IEICE Trans. Electron.</i> , E83-C(12), (December 2000).	
SBG	32.	"Thick AlN template on SiC substrate - Novel semi insulating substrate for GaN-based devices," © 2003 by TDI, Inc., http://www.tdii.com/products/AlN_SiC.html .	
SBG	33.	Tilak et al., "Influence of Barrier Thickness on the High-Power Performance of AlGaIn/GaN HEMTs," <i>IEEE Electron Device Letters</i> , 22(11), pp. 504-506 (Nov. 2001).	
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SBG	35.	United States Patent Application entitled "Silicon Carbide on Diamond Substrates and Related Devices and Methods," Serial No. 10/707,898, filed January 22, 2004 (Cree Docket No. P0387).	
SBG	36.	United States Patent Application entitled "Methods of Fabricating Nitride-Based Transistors with a Cap Layer and a Recessed Gate," Serial No. 10/897,726, filed July 23, 2004 (Attorney Docket No. 5308-392).	
SBG	37.	United States Patent Application entitled "High Power Density and/or Linearity Transistors," Serial No. 11/005,107, filed December 6, 2004 (Attorney Docket No. 5308-511).	
SBG	38.	United States Patent Application entitled "Field Effect Transistors (FETS) Having Multi-Watt Output Power at Millimeter-Wave Frequencies," Serial No. 11/005,423, filed December 6, 2004 (Attorney Docket No. 5308-512).	
SBG	39.	United States Patent Application entitled "Group III Nitride Field Effect Transistors (FETs) Capable of Withstanding High Temperature Reverse Bias Test Conditions," Serial No. 11/080,905, filed March 15, 2005 (Attorney Docket No. 5308-516).	
SBG	40.	United States Patent Application entitled "Aluminum Free Group III-Nitride Based High Electron Mobility Transistors and Methods of Fabricating Same," Serial No. 11/118,575, filed April 29, 2005 (Attorney Docket No. 5308-543).	
SBG	41.	United States Patent Application entitled "Binary Group III-Nitride Based High Electron Mobility Transistors and Methods of Fabricating Same," Serial No. 11/118,675, filed April 29, 2005 (Attorney Docket No. 5308-544).	

Examiner Signature	<i>K. G. [Signature]</i>	Date Considered	12-8-05
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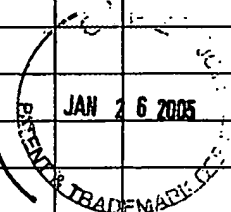
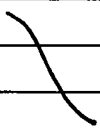
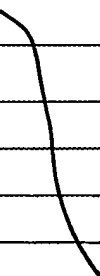
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		Group Art Unit	2815 2812
		Examiner Name	Richards, N. Drew Geyer, J.
Sheet 3 of 3	Attorney Docket Number	5308-291	

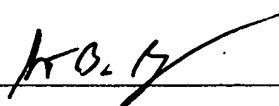
OTHER NON PATENT LITERATURE DOCUMENTS			
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SBG	42.	United States Patent Application entitled "Composite Substrates of Conductive And Insulating or Semi-Insulating Group III-Nitrides For Group III-Nitride Devices," Serial No. 11/103,127, filed April 11, 2005 (Attorney Docket No. 5308-551).	
SBG	43.	United States Patent Application entitled "Thick Semi-Insulating or Insulating Epitaxial Gallium Nitride Layers and Devices Incorporating Same," Serial No. 11/103,117, filed April 11, 2005 (Attorney Docket No. 5308-553).	
SBG	44.	United States Patent Application entitled "Cap Layers and/or Passivation Layers for Nitride-Based Transistors, Transistor Structures and Methods of Fabricating Same," Serial No. 10/996,249, filed November 23, 2004 (Attorney Docket No. 5308-373).	
SBG	45.	Walker, J. L. B. (Ed.), <i>High Power GaAs FET Amplifiers</i> , Norwood, MA: Artech House, pp. 119-120 (1993).	
SBG	46.	Wu et al., "3.5-Watt AlGaIn/GaN HEMTs and Amplifiers at 35 GHz," IEDM-2003, Cree, Inc.	
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SBG	48.	Wu et al., "30-W/mm GaN HEMTs by Field Plate Optimization," <i>IEEE Electron Device Letters</i> , 25(3), pp. 117-119 (March 2004).	
SBG	49.	Wu et al., "Bias-dependent Performance of High-Power AlGaIn/GaN HEMTs," <i>IEDM Technical Digest</i> , p. 378-380 (2001).	
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SBG	52.	Yu et al., "Schottky Barrier Engineering in III-V Nitrides via the Piezoelectric Effect," <i>Applied Physics Letters</i> , 73(13), pp. 1880-1882 (Sept. 28, 1998).	
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Examiner Signature	<i>NO. 17</i>	Date Considered	12-8-05
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Form PTO-1449		U.S. Department of Commerce Patent and Trademark Office		Attorney Docket No. 5308-291		Serial No. 10/758,871	
LIST OF DOCUMENTS CITED BY APPLICANT (Use several sheets if necessary)				Applicant: Sheppard et al.		Filing Date: January 16, 2004	
						GAU-2815-2812	
U.S. PATENT DOCUMENTS							
Examiner Initials	1.	Document No.	Date (m/d/y)	Name	Class	Subclass	Filing Date if Appropriate
SDG		5,592,501	1/7/97	Edmond et al.	372	45	
							
FOREIGN PATENT DOCUMENTS							
		Document Number	Date	Country	Class	Subclass	Translation (Yes/No)
							
OTHER DOCUMENTS							
							

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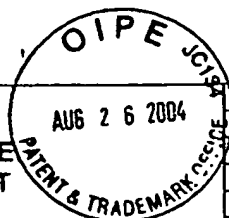
INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet A1

of

A1



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Application Number	10/758,871
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SBG	1.	Ben-Yaacov et al., "AlGaIn/GaN Current Aperture Vertical Electron Transistors with Regrown Channels," <i>Journal of Applied Physics</i> . Vol. 95, No. 4, pp. 2073-2078 (2004).	
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SBG	7.	United States Patent Application entitled "Methods of Fabricating Nitride-Based Transistors with a Cap Layer and a Recessed Gate," filed July 23, 2004 (Attorney Docket No. 5308-392).	
SBG	8.	United States Patent Application entitled "Methods of Having Laterally Grown Active Region and Methods of Fabricating Same," filed July 26, 2004 (Attorney Docket No. 5308-374).	
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SBG	10.	United States Patent Application entitled, "Silicon Carbide on Diamond Substrates and Related Devices and Methods," (Cree Docket No. P0387).	

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Sheet A1 of A3

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SBG	44.	PCT	WO 03/049193	A1	Cree, Inc.	06-12-2003	
SBG	45.	JP	2002016087	A	NEC Corp	01-18-2002	Abstract
SBG	46.	PCT	WO 01/57929	A1	Cree Lighting Company	08-09-2001	
SBG	47.	JP	10-050982		Nippon Telegraph & Telephone Corp.	02-20-1998	Abstract
SBG	48.	PCT	WO 93/23877	A1	Massachusetts Institute of Technology	11-25-1993	
SBG	49.	JP	2001230407	A	Matsushita Electric Industrial Co. Ltd.	08-24-2001	Abstract

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SBG	50.	EP	0 563 847	A2	Matsushita Electric Industrial Co., Ltd.	10-06-1993

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SBG	51.	Asbeck et al. "Piezoelectric charge densities in AlGaIn/GaN HFETs," <i>Electronics Letters</i> . Vol. 33, No. 14, pp. 1230-1231 (1997).			
SBG	52.	Breitschadel et al. "Minimization of Leakage Current of Recessed Gate AlGaIn/GaN HEMTs by Optimizing the Dry-Etching Process," <i>Journal of Electronic Materials</i> . Vol. 28, No. 12, pp. 1420-1423 (1999).			
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Examiner Signature	<i>MS. H</i>	Date Considered	12-8-05
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